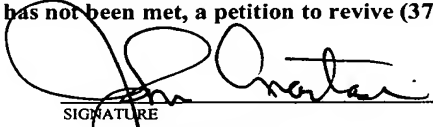


|   |   |  |  |
|---|---|--|--|
| FORM PTO-1390<br>PATENT AND TRADEMARK OFFICE<br>(REV. 1094)   |   | ATTORNEY'S DOCKET NUMBER<br>D0460-7011US   |  |
| TRANSMITTAL LETTER TO THE UNITED STATES<br>DESIGNATED/ELECTED OFFICE (DO/EO/US)<br>CONCERNING A FILING UNDER 35 U.S.C. 371  |   | U.S. APPLICATION NO. (If known, see 37 CFR 1.5)<br><div style="font-size: 1.5em; font-weight: bold;">10/501415</div> |  |
| INTERNATIONAL APPLICATION NO.<br>PCT/US2003/000995  | INTERNATIONAL FILING DATE<br>13 January 2003 (13.01.2003) | PRIORITY DATE CLAIMED<br>11 January 2002 (11.01.2002)  |  |
| TITLE OF INVENTION<br>COMPOSITIONS INCLUDING AMMONIA OXIDIZING BACTERIA AND METHODS OF USING SAME   |   |  |  |
| APPLICANT(S) FOR DO/EO/US<br>WHITLOCK, David R.   |   |  |  |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:   |   |  |  |
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This express request to begin national procedures (35 U.S.C. 371(f) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).</li> <li>4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)).           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> has been transmitted by the International Bureau.</li> <li>c. <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)).</li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> have been transmitted by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(C)(5)).</li> </ol> |   |  |  |
| <b>Items 11. To 16. Below concern document(s) or information included:</b>  |   |  |  |
| <ol style="list-style-type: none"> <li>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98 with Form PTO-1449 (modified) and references.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input type="checkbox"/> A FIRST preliminary amendment.</li> <li>14. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A change of power of attorney and/or address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821-1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> <li>20. <input checked="" type="checkbox"/> Other items or information:           <div style="margin-left: 20px;">             Copy of PCT Published Application<br/>             Application Data Sheet           </div> </li> </ol>   |   |  |  |
| Express Mail Label No. EV308931819US<br>Mailed July 9, 2004   |   |  |  |
| U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)  |   | ATTORNEY'S DOCKET NUMBER<br>D0460-7011US   |  |
| INTERNATIONAL APPLICATION<br>PCT/US2003/000995  |   |  |  |

|  |              |              |           |                           |    |
|--|--------------|--------------|-----------|---------------------------|----|
| 21. <input checked="" type="checkbox"/> The following fees are submitted:  |              |              |           | CALCULATIONS PTO USE ONLY |    |
| <b>BASIC NATIONAL FEE (37 CFR 1.492)-(5):</b>  |              |              |           | <b>10/501415</b>          |    |
| Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO  |              |              |           | \$1080.00                 |    |
| International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO  |              |              |           | \$920.00                  |    |
| International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee paid to USPTO (37 CFR 1.445(a)(2))   |              |              |           | \$770.00                  |    |
| International preliminary examination fee paid to USPTO (37 CFR 1.482) But all claims did not satisfy provisions of PCT Article 33(1)-(4)  |              |              |           | \$730.00                  |    |
| International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4)  |              |              |           | \$100.00                  |    |
| <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>  |              |              |           | \$ 100.00                 |    |
| Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 X 30 Months from the earliest claimed priority date (37 CFR 1.492(e)).   |              |              |           | \$                        |    |
| CLAIMS   | NUMBER FILED | NUMBER EXTRA | RATE      |                           |    |
| Total Claims   | 30 - 20 =    | 10           | X \$18.00 | \$180.00                  |    |
| Independent Claims   | 4 - 3 =      | 1            | X \$86.00 | \$86.00                   |    |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable)  |              |              | +\$290.00 | \$                        |    |
| <b>TOTAL OF ABOVE CALCULATIONS =</b>   |              |              |           | \$366.00                  |    |
| Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above Are reduced by 1/2.  |              |              |           | \$183.00                  |    |
| <b>SUBTOTAL =</b>  |              |              |           | \$183.00                  |    |
| Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 Months from the earliest claimed priority date (37 CFR 1.492(f)).   |              |              |           | \$                        |    |
| <b>TOTAL NATIONAL FEE =</b>  |              |              |           | \$183.00                  |    |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate coversheet (37 CFR 3.28, 3.31). \$40.00 per property +  |              |              |           | \$                        |    |
| <b>TOTAL FEES ENCLOSED =</b>   |              |              |           | \$183.00                  |    |
|  |              |              |           | Amount to be:             |    |
|  |              |              |           | refunded                  | \$ |
|  |              |              |           | charged                   | \$ |
| <p>a <input type="checkbox"/> A check in the amount of \$ _____.00 to cover the above fees is enclosed.</p> <p>b. Please charge by Deposit Account No. _____. In the amount of \$ _____. To cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>c. <input type="checkbox"/> The commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 502762. A duplicate of this sheet is enclosed.</p> <p>d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p> |              |              |           |                           |    |
| <p><b>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b) must be filed and granted to restore the application to pending status.</b></p>   |              |              |           |                           |    |
| SEND ALL CORRESPONDENCE TO:  |              |              |           |                           |    |
| LOWRIE, LANDO & ANASTASI, LLP<br>One Main Street<br>Cambridge, Massachusetts 02142<br>Tel: (617) 395-7000  |              |              |           |                           |    |
| CUSTOMER NUMBER <b>37462</b>   |              |              |           |                           |    |
| SIGNATURE <br>NAME John N. Anastasi<br>REGISTRATION NO. 37,765   |              |              |           |                           |    |